

# ***DTRA***

***DEFENSE THREAT REDUCTION AGENCY***



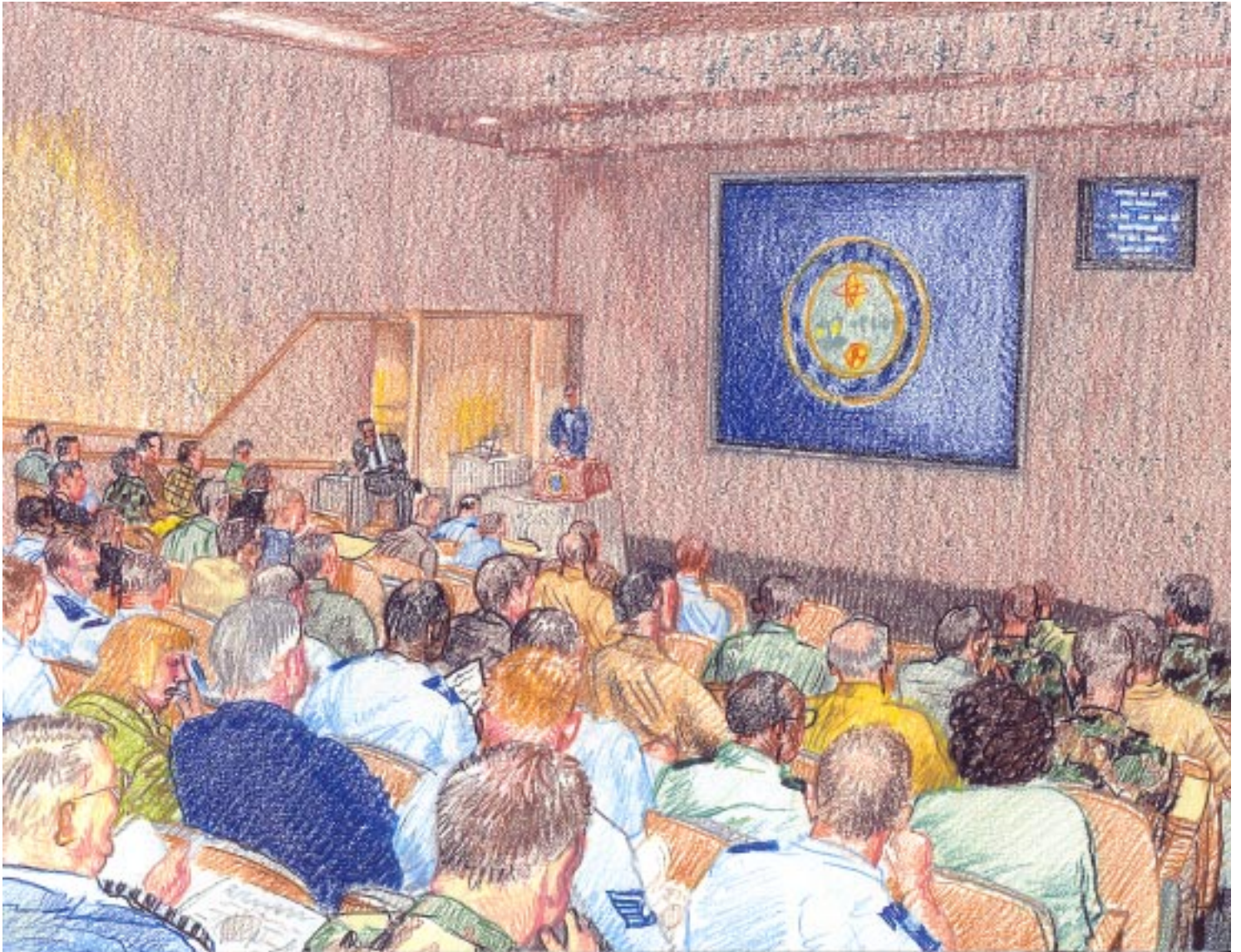
## **Defense Nuclear Weapons School**

**COURSE CATALOG**

# **2005**







<https://dnws.abq.dtra.mil>

# Defense Nuclear Weapons School

## Course Catalog 2005





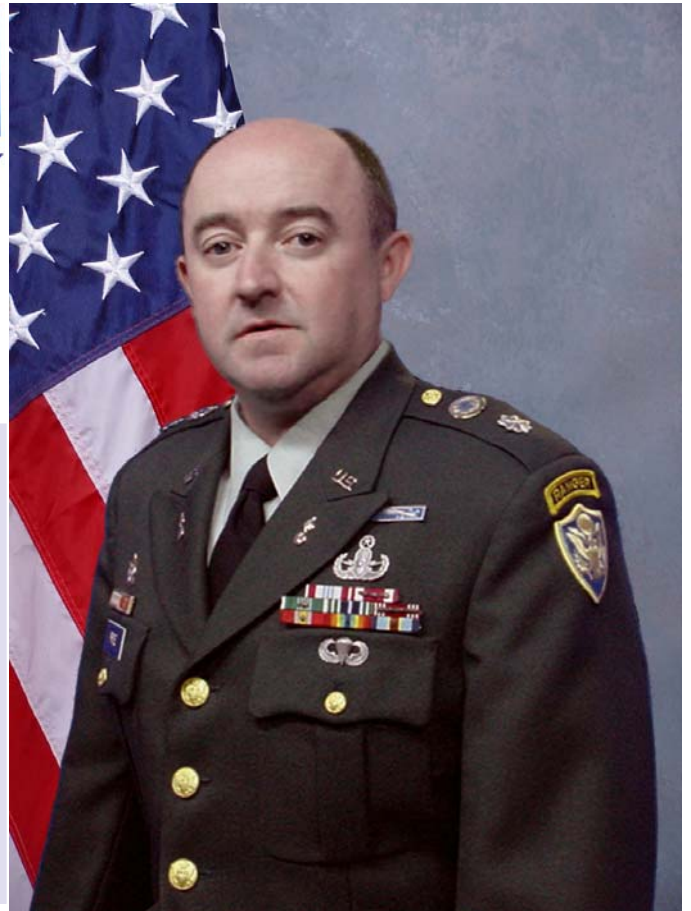


Commandant  
Defense Nuclear Weapons School  
Kirtland AFB NM 87117-5669

*"The United States will continue to make clear that it reserves the right to respond with overwhelming force – including through resort to all of our options – to the use of WMD against the United States, our forces abroad, and friends and allies.*

*The United States must be prepared to respond to the use of WMD against our citizens, our military forces, and those of friends and allies. We will develop and maintain the capability to reduce to the extent possible the potentially horrific consequences of WMD attacks at home and abroad."*

*National Strategy to Combat Weapons of Mass Destruction, December 2002*



Every day we achieve new levels of readiness in the defense of our country. Be assured that the Defense Threat Reduction Agency, and particularly the Defense Nuclear Weapons School (DNWS) encounters these challenges and strives to meet success at every turn.

The School retains its position as the premier training center for Department of Defense (DoD) nuclear core-competencies. With this distinguished function of serving the nuclear community, the path for responding to weapons of mass destruction (WMD) has been placed upon us in related training proficiencies.

Along with the command and control programs, incident response training, and proliferation awareness courses for WMD events, the DNWS has added two new courses for FY05. The Joint Planners Course for Combating Weapons of Mass Destruction and the basic/advance versions of the Consequence Assessment Tool Set. We also plan to offer the WMD Staff Support Seminar by distance learning. Please check the DNWS website for the latest news on this course offering.

This 2005 catalog provides information on all DNWS courses, including dates, objectives, content, maps, contact numbers, and e-mail addresses. All DNWS efforts are focused toward effective training. The School strives to provide professional growth and the catalog is designed to be informative and helpful in that regard. If specific programs are sought, contact any DNWS department or staff member at the numbers listed in the catalog to learn if the School can be your source of training. The DNWS exists to serve the training needs of our DoD community.

LTC Charles A. Pryde  
Commandant, Defense Nuclear Weapons School

## Contents

Introduction .....	4
Registration .....	4
Security Issues .....	5
Weapon Display Area (WDA) .....	5
General Information .....	5-6
Mobile Training Courses .....	6
In Residence Course Synopses .....	7
Mobile Training Course Synopses .....	8
DTRA Hosted Course Synopses .....	8
Course Calendar .....	9
<b>Consequence Assessment Tool (CATS A) Advanced Course .....</b>	<b>11</b>
<b>Consequence Assessment Tool (CATS B) Basic Course .....</b>	<b>12</b>
<b>Hazard Prediction and Assessment Capability (HPAC A) Advanced Course .....</b>	<b>13</b>
<b>Hazard Prediction and Assessment Capability (HPAC B) Basic Course .....</b>	<b>14</b>
<b>Joint Nuclear Explosive Ordnance Disposal Course (JNEODC) .....</b>	<b>15</b>
<b>Joint DoD-DOE/NNSA Nuclear Surety Executive Course (JNSEC) .....</b>	<b>16</b>
<b>Joint Planner's Course for Combating WMD (JPC) .....</b>	<b>17</b>
<b>Nuclear Weapons Orientation Course (NWOC) .....</b>	<b>18</b>
<b>Proliferation, Terrorism, and Response Course (PTRC) .....</b>	<b>19</b>
<b>Radiological Accident Command, Control, and Coordination (RAC<sup>3</sup>) .....</b>	<b>20</b>
<b>Radiological Emergency Team Operations (RETOPS) .....</b>	<b>21</b>
<b>Theater Nuclear Operations Course (TNOC) .....</b>	<b>22</b>
<b>Weapons of Mass Destruction Command, Control, and Coordination (WMDC<sup>3</sup>) .....</b>	<b>23</b>
<b>Commander and Staff Radiological Accident Response (CASRAR) Workshop .....</b>	<b>25</b>
<b>Civil Support Team Radiological Training Course (CST-RTC) .....</b>	<b>26</b>
<b>Nuclear Weapons Familiarization Seminar (NWFS) .....</b>	<b>27</b>
<b>Proliferation, Terrorism, and Response Staff Course (PTRSC) .....</b>	<b>28</b>
<b>Radiological Emergency Team Orientation (RETOR) .....</b>	<b>29</b>
<b>Theater Nuclear Operations Staff Course (TNOSC) .....</b>	<b>30</b>
<b>Weapons of Mass Destruction Incident Response Workshop (WMDIRW) .....</b>	<b>31</b>
<b>Weapons of Mass Destruction Staff Support Seminar (WMDS<sup>3</sup>) .....</b>	<b>32</b>
<b>Medical Effects of Ionizing Radiation (MEIR) .....</b>	<b>34</b>
<b>Nuclear Research and Operations Officer Course (NROOC) .....</b>	<b>35</b>
Sample MTT Request Letter .....	36
MTT Funding Policy .....	37
Sample MTT Funding Letter .....	38
Sample Access Request for DOE Personnel to Attend a DNWS Course .....	39
Sample Access Request for DoD Personnel to Attend a DOE Facility .....	40
Map from Albuquerque Int'l Airport to Kirtland AFB .....	41
Map of Kirtland AFB .....	42
DNWS Course Registration Form .....	43

## Introduction

The Defense Nuclear Weapons School (DNWS) is a unique academic entity providing the warfighter with topical information relating to United States nuclear core competency training, radiological/nuclear response training, and CBRNE/homeland defense training.

### Mission

Provide nuclear weapons core competencies and chemical, biological, radiological, nuclear, and high explosive (CBRNE) response training to DoD, other Federal and State Agencies, and national laboratory personnel.

### Vision

To be a premier DoD military multi-Service/Joint CBRNE training facility.

### Training Objectives

The primary objective of the DNWS is to create, develop, and implement professional training through alternative and innovative training technologies, ensuring our nation maintains safe, reliable, and credible nuclear deterrence. The DNWS provides the warfighter with topical information relating to United States nuclear core competency training, radiological/nuclear response training, and CBRNE/homeland defense training.

## Registration

Specific information about the DNWS is available on the Internet. Go to <https://dnws.abq.dtra.mil> to view:

### Courses

View the annual course schedule for the upcoming year.

### About DNWS

Learn additional information about the DNWS, the Albuquerque area, weather, maps, and Kirtland AFB.

### Access the DNWS Controlled Site

This part of the DNWS web site is restricted to DoD and other Federal and state agencies. To request access, click "Log In" tab then click "Request Access" tab.

Your request is received and reviewed by DNWS Visitor Control Staff, you will receive an e-mail that contains your user name and password. You may now access the DNWS controlled website: click on the "Log In" tab. Enter your user name and password. This query is case sensitive—be sure to enter your user name and password exactly as shown on the access confirmation the DNWS sends you via e-mail.

## Registration

### On-line Course Registration

Each organization has a designated quota manager. To make a reservation for a DNWS course contact the appropriate quota manager (see page 9 of this catalog for a current listing of quota managers.)

Quotas for DNWS courses are based on organization requests. Requests for nonallocated quotas are considered on a case-by-case basis.

If registering for a classified course, an additional form will appear on the screen. Because security clearance data verification is required, the form must be printed and endorsed by the organizational security manager. Once the clearance information has been coordinated, the form can be electronically transmitted (FAX only) to the DNWS Student Services at 505-846-9168 or DSN 246-9168. It is imperative that the security clearance information be received at the DNWS a minimum of 15 working days before the class start date.

### Links

The DNWS on-line database provides links to Internet sites about terrorism, response, proliferation, chemical, biological, and nuclear and radiological issues.

### Registering Without Internet Access

Contact your organizational quota manager to obtain a reservation for a DNWS course (see page 9 for the most current listing of quota managers). After obtaining a seat in the desired course, complete the DNWS Course Registration Form on page 43 of this catalog, including security access information, if applicable. Security clearance information is required for all classified courses. Section II of the DNWS Course Registration Form must be completed and verified with appropriate endorsements.

Department of Energy (DOE) personnel must submit DOE Form 5631.20 to register (see example on page 39). DoD personnel are required to submit the DOE Form 5631.20 in order to gain access to DOE facilities on Kirtland AFB for the Joint Nuclear Explosive Ordnance Disposal Course (see example on page 40).

Mail or fax completed registration forms and security clearance documents to:

**Defense Nuclear Weapons School**  
**Attn: Student Services**  
**1680 Texas St. SE**  
**Kirtland AFB, NM 87117-5669**  
**FAX: (505) 846-9168 or**  
**DSN 246-9168**

## Security Issues

All personnel entering the DNWS are required to show valid identification at the security desk.

As previously noted, specific courses may require a security clearance and some require special access. Each DNWS course has individual security requirements specific to that program and are noted in the course description.

Clearance and access information for DoD personnel is submitted by using the DNWS Course Registration Form. DOE personnel must use the DOE Form 5631.20.

Security clearance information must be received by student services a minimum of 15 working days prior to class start date.

## Communications Equipment

Internet access at the DNWS is available for students on a limited basis. The base library is available Monday through Thursday from 1000 to 1900, Fridays from 1000 to 1700, and Saturdays from 1300 to 1700, and can facilitate internet access for your convenience. Security procedures prohibit bringing cellular telephones, two-way pagers, personal digital assistants, cameras, or lap top computers into the school. Telephone lines are available for students to make and receive official telephone calls.

## Weapons Display Area (WDA)

The DNWS manages DoD's only classified collection of U.S. nuclear weapons, associated components, and weapons delivery systems. Access to the WDA is normally in conjunction with DNWS courses and clearance information must be on file at the DNWS before access into the WDA can be granted. A DoD secret-level clearance with Restricted Data (RD) or Critical Nuclear Weapons Design Information (CNWDI) access, or a DOE "Q" clearance with Sigmas 1-5 is required—**no exceptions**. With permission from the DNWS Commandant, provisions can be made for a group to be escorted through the WDA. Tours are available for those who meet security clearance requirements and submit required documents in accordance with School policy. Touring the WDA offers students and visitors a unique opportunity to view exhibits and discuss stockpile issues with subject-matter experts.

To solicit a special tour of the WDA, a written request must be submitted to:

**Defense Nuclear Weapons School  
Attn: Student Services  
1680 Texas St. SE  
Kirtland AFB, NM 87117-5669**

**FAX: 505-846-9168 or DSN 246-9168**

## Weapons Display Area (WDA)

Security clearance information must be received at the DNWS a minimum of 15 working days before the scheduled tour date.

For clarification in security clearances, refer to DODD 5210.2, *Access To and Dissemination of Restricted Data*.

## General Information

### Enrollment Confirmation

Enrollment confirmation will be forwarded to prospective students via e-mail upon receipt of a completed DNWS Course Registration Form or DOE Form 5631.20, as appropriate. To ensure receipt of confirmation and other information, an e-mail address must be provided on the registration form. Student services will keep students apprised of changes in class dates, times, or location.

If confirmation is not received at least 1 week prior to class start date, please call (505) 846-5666 or DSN 246-5666, Monday through Friday, 0730–1630, Mountain Standard Time.

### Billeting

Individuals attending courses at the DNWS are responsible for billeting arrangements.

Reservations for military personnel and Federal employees can be made by contacting the Kirtland AFB Billeting Office (Kirtland Inn) at 505-846-1497 or DSN 246-1497 (FAX 505-846-4142 or DSN 246-4142).

Military personnel at the rank of O-6 or above and civilian personnel at grade GS-15 or above should contact the Kirtland AFB Protocol Office at 505-846-4119 or DSN 246-4119.

The Kirtland Inn will make reservations on-base if space is available. If space is not available, they will make reservations at a government contract hotel. Approximately 85 percent of students are housed off-base. Students should plan to pay out-of-pocket expenses.

The Kirtland Inn is the only agency that can issue statements of nonavailability, and only if billeting arrangements have been made through their office.

A visitor pass to enter Kirtland AFB may be necessary. Individuals should plan accordingly and arrive at the Kirtland AFB Visitor's Center at least 45 minutes prior to class start time on the first day of class. For more information on base access, see the paragraph titled Entering Kirtland AFB.

## General Information

### Transportation

Kirtland AFB has limited taxi/transportation services. The Albuquerque International Airport is approximately 5 miles from the DNWS. On-base billeting is approximately 3 miles from the DNWS. A rental car is highly recommended.

### Dining

An award-winning military dining facility is located at 1551 1st St. on Kirtland AFB, just a mile from the school. If meals are missed due to field exercises, an official memorandum will be provided by the DNWS.

### Entering Kirtland AFB

To obtain a visitor's pass on Kirtland AFB, please ensure you have: a military or government identification card, a valid driver's license, proof of insurance, and vehicle registration, or a rental agreement.

For your safety, please remember to observe all posted speed limits and seat belt requirements while driving on Kirtland AFB and the surrounding area.

### Office Hours

Office hours at the DNWS are Monday through Friday, 0730 to 1630, Mountain Standard Time.

## Mobile Training Courses

The DNWS will provide MTTs at the specific request of a designated official representing any DoD organization. An MTT is a distinctive version of an in-residence course, or a specially designed program that is tailored to fit the requirements of the requesting organization.

Limited dates for MTTs are included in the annual calendar. Requests should be submitted early and in accordance with the policy and formats on pages 36-38 of this catalog.

Requesting agencies are responsible for all expenses associated with MTTs. Expenses include travel, lodging, per diem, and administrative supplies and materials.



**Consequence Assessment Tool Set (CATS) Advanced Course** is a 3-day course that will reemphasize the students' understanding of the basic course materials, and focuses on an in-depth understanding of output analysis, infrastructure effects, and hazard response. Particular attention is focused on leveraging GIS data sets into the consequence assessment of a catastrophic event. Prerequisite: CATS B.

**Consequence Assessment Tool (CATS) Basic Course** is a 3-day course that provides the student with a basic understanding of how to model damage and casualties from technological disasters to include chemical, biological, nuclear, radiological, and meteorological sources. This basic course teaches each student to navigate CATS tools, buttons, and commands to create, navigate, and open and close CATS scenarios. The class also instructs on the geographical information system and the wide range of geo-referenced material CATS can use. The student will learn to use CATS model outputs to help manage a hazard incident.

**Hazard Prediction and Assessment Capability (HPAC) 4.0.x Advanced Course** is a 4-day training program that reemphasizes the skills learned in the basic course and advances to the HPAC Editor to make detailed module parameter inputs. The focus is on a more complete control of these parameters to obtain a comprehensive output for analyses. Prerequisite: HPAC B.

**Hazard Prediction and Assessment Capability (HPAC) 4.0.x Basic Course** is a 4-day program that offers instruction in computer software products used for consequence management. Primary training focus is to demonstrate user interface for each of the HPAC modules (industrial facilities, weapon effects, and weather predictions).

**Joint Nuclear Explosive Ordnance Disposal Course (JNEODC)** is a 9-day training course that provides detailed sustainment training for EOD officers and enlisted personnel in nuclear EOD operations. The program focuses on nuclear weapons hazards, weapons stockpile safety features and safeguards, and weapons development. This class is offered for EOD personnel only.

**Joint DoD-DOE/NNSA Nuclear Surety Executive Course (JNSEC)** is an executive-level program offering an overview of safety, security, and control aspects of the U.S. nuclear weapons program. JNSEC is a 1-day program conducted in the Washington DC area, and a second iteration is a 1 ½-day version offered at the DNWS to accommodate the Weapons Display Area Tour.

**Joint Planners Course (JPC) for Combating WMD** is a 5-day course that provides the student with a firm understanding of how to perform planning functions related to combating WMD activities, threats, and incidents. The course is geared toward the Joint Staff, Combatant and Component Commands, Combat Support Agencies, and Service HQs. The course will address weapons elimination operations, force protection, U.S. nuclear operations, consequence management foreign and domestic, nonproliferation, counter-proliferation, and JOPES as they apply to WMD planners.

**Nuclear Weapons Orientation Course (NWOC)** is a 5-day course that provides an overview of the history and development of nuclear weapons, management of the U.S. nuclear stockpile, and the issues and challenges facing the program. The modules focus on four functional areas: Nuclear Weapon Fundamentals, Nuclear Weapon Effects, Nuclear Weapons Stockpile, and Nuclear Weapons Issues.

**Proliferation, Terrorism, and Response Course (PTRC)** is a 4 ½ day course that provides an overview of the worldwide threat posed by terrorist groups and nations armed with chemical, biological, and nuclear WMD. The course describes WMD characteristics, WMD proliferation, and nonproliferation and counterproliferation programs. The program includes an interactive computer-based exercise. This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training System.

**Radiological Accident Command, Control, and Coordination (RAC<sup>3</sup>)** is a 5-day training course that presents the problems and responsibilities involved in nuclear weapon accident response. Curriculum content includes lessons learned from past accidents, Federal, state, and local agency responsibilities, as well as key issues specific to a nuclear weapons accident (i.e., legal, media, and medical and hazards management issues). The course concludes with an interactive computer-based exercise.

**Radiological Emergency Team Operations (RETOPS) Course** is a 9-day course that offers hands-on training for members of a nuclear emergency response team. Subject matter includes modules on biological effects of radiation, response plans and capabilities, radiation detection equipment, contamination control stations, surveys, and command and control. The course culminates with several field exercises during which students fully dress-out in anti-contamination clothing, use RADIAC equipment, and perform realistic nuclear emergency team functions at the School's accident training sites.

**Theater Nuclear Operations Course (TNOC)** is a 5-day course that provides training for planners, support staff, targeteers, and staff nuclear planners for joint operations and targeting. The course provides overview of nuclear weapon design, capabilities and effects as well as U.S. nuclear policy, and joint nuclear doctrine. TNOC meets U.S. Army qualification requirements for the Additional Skill Identifier 5H. This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training System.

**Weapons of Mass Destruction Command, Control, and Coordination (WMDC<sup>3</sup>) Course** is a 4-day course designed for DoD and Federal agency personnel in the procedures and mechanics involved in DoD support of WMD/CBRNE disaster response operations. The course focuses on command level plans and support constructs utilized in providing consequence management support to federal domestic CBRNE emergencies that occur within the U.S. The course centers around education in the DoD CBRNE disaster response structure. The course concludes with an interactive computer-based exercise.

## DNWS Mobile Training Team (MTT) Courses

**Commander and Staff Radiological Accident Response (CASRAR) Workshop** is a 3-day supervisory-level course that presents a fundamental approach to complex radiological response issues. Content of the program discusses lessons learned from past accidents, Federal, state, and local agency responsibilities, as well as key issues specific to a nuclear weapons accident (i.e., legal, media, and medical and hazards management issues).

**Civil Support Team Radiological Training Course (CST-RTC)** is a 3- to 5-day training event covering the response elements to a radiological incident. Training is tailored to the mission requirements of National Guard civil support teams. Modules can include effects of radiation, plans and capabilities, detection equipment, surveying, and command and control.

**Nuclear Weapons Familiarization Seminar (NWFS)** is a 3-day program that presents the history and development of nuclear weapons, and the management of the U.S. nuclear stockpile. Four primary functional areas focus on nuclear weapon fundamentals, nuclear weapon effects, nuclear weapons stockpile, and nuclear weapons issues.

**Proliferation, Terrorism, and Response Staff Course (PTRSC)** is a 4½ day course that provides an overview of the worldwide threat posed by terrorist groups and nations armed with chemical, biological, and nuclear WMD. The course describes WMD characteristics, WMD proliferation, and nonproliferation and counterproliferation programs. The program includes an interactive computer-based exercise.

**Radiological Emergency Team Orientation (RETOR) Course** is a 3- to 5-day course tailored to the host's requirements. The program can cover the full spectrum of actions required in a team response to a radiological accident. Modules can include biological effects of radiation, response plans and capabilities, radiation detection equipment, contamination control stations, radiological surveys, and command and control.

**Theater Nuclear Operations Staff Course (TNOSC)** is a 5-day program that provides training for planners, support staff, targeteers, and staff nuclear planners for joint operations and targeting. The course provides overview of nuclear weapon design, capabilities, and effects as well as U.S. nuclear policy, and joint nuclear doctrine. TNOSC meets U.S. Army qualification requirements for the additional skill identifier 5H.

**Weapons of Mass Destruction Incident Response Workshop (WMDIRW)** is a 3-day course that provides DoD and Federal agency personnel the procedures and mechanics involved in DoD support of WMD/CBRNE disaster response operations. The course focuses on command level plans and support constructs utilized in providing consequence management support to federal domestic CBRNE emergencies that occur within the U.S. The course centers around education in the DoD CBRNE disaster response structure. Course can be specifically tailored for the state WMD CST with the intent to integrate training for CST leadership and their state emergency management partners.

**Weapons of Mass Destruction Staff Support Seminar (WMDS<sup>3</sup>)** is a 1-day course that provides Combatant Commanders and their planning staff instruction concerning the procedures and mechanics involved in DoD support to Federal WMD/CBRNE disaster response operations to incorporate those processes into their relevant OPLANS/CONPLANS. The course centers around education in the DoD CBRNE disaster response structure, how that structure associates with the U.S. government response process, or DOS foreign consequence management process, and the mechanics and units that are utilized to provide that DoD support.

## DNWS Hosted Courses

**Medical Effects of Ionizing Radiation (MEIR) Course** is a 5-day course presented by the Armed Forces Radiobiology Research Institute (AFRRI) and hosted at the DNWS. The program provides medical personnel with background material linking human injury and combat effectiveness in a nuclear weapons detonation or accident environment. For specific information relating to the MEIR course, contact AFRRI at (301) 295-0316 or DSN 295-0316.

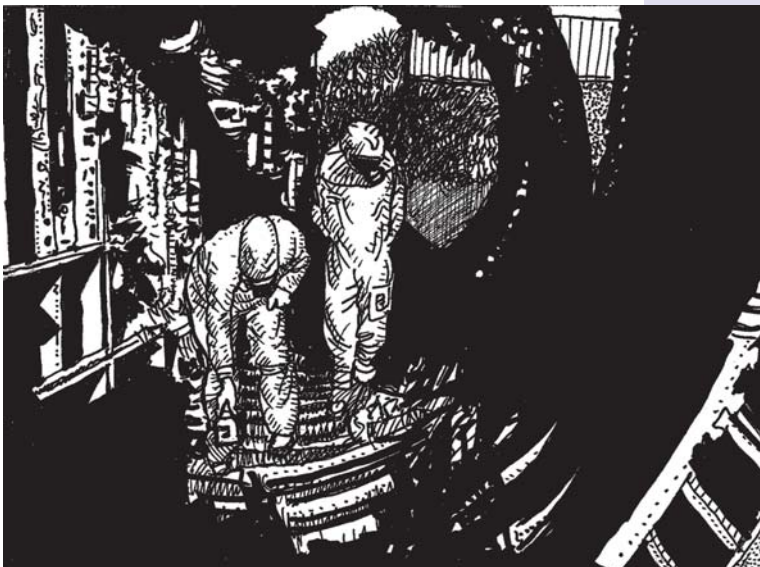
**Nuclear Research and Operations Officer Course (NROOC)** is presented annually at the DNWS by the U.S. Army Nuclear and Chemical Agency (USANCA). The training is limited to Army officers and serves as the Nuclear Research and Operations Officer Functional Area (FA 52) qualifying course. Topics include nuclear weapons programs, historical issues, nuclear weapons effects, and current FA 52 career field information. For specific information relating to NROOC, contact USANCA at (703) 806-7866 or DSN 656-7866.

# DEFENSE NUCLEAR WEAPONS SCHOOL FY05 COURSE SCHEDULE

		Oct 04	Nov 04	Dec 04	Jan 05	Feb 05	Mar 05	Apr 05	May 05	Jun 05	Jul 05	Aug 05	Sep 05
<b>DNWS IN-RESIDENCE COURSES</b>	<b>CATS A</b> R021					14-16			16-18				
	<b>CATS B</b> R020		1-3		24-26		28-30	18-20		27-29	18-20	22-24	19-21
	<b>HPAC A</b> R018					8-11			10-13				
	<b>HPAC B</b> R017	26-29			18-21		22-25	12-15		21-24	12-15	16-19	13-16
	<b>JNEODC</b> R006				24-	-3	21-31			6-16	25-	-4	12-22
	<b>JNSEC</b> R009						9-10						21-22
	<b>JPC</b> R022			6-10				4-8			11-15		TBD
	<b>MEIR</b> R015					21-25					11-15		
	<b>NROOC</b> R019										11-29		
	<b>NWOC</b> R001	18-22	1-5		24-28		21-25	4-8		20-24			5-9
	<b>PTRC</b> R010			6-10			14-18			6-10			
	<b>RAC<sup>3</sup></b> R003		29-	-3		7-11		18-22	23-27		25-29		19-23
	<b>RETOPS</b> R005	18-28	29-	-9		28-	-10	4-14	2-12			8-18	
	<b>TNOC</b> R013					7-11						1-4	
	<b>WMDC<sup>3</sup></b> R016		15-18		24-27				16-19			1-4	
<b>MOBILE TRAINING TEAM COURSES</b>	<b>CASRAR</b> NR002	26-28		13-17	11-13		1-3	5-7	10-12	21-23		30-	-1
	<b>CST-RTC</b> NR019	4-8					28-	-1; 25-29	23-27	20-24	25-29	22-26	26-30
	<b>NWFS</b> NR017	5-7	15-17	14-16	11-13	14-18			16-20			1-5	27-29
	<b>PTRSC</b> NR010												26-30
	<b>RETOR</b> NR005		8-12		17-21	14-18							
	<b>TNOSC</b> NR013							18-22				15-19	
	<b>WMDIRW</b> NR018	12-14	1-5	1-3	11-13	1-4	15-17	19-21	23-26	14-16	25-28		
	<b>WMDS<sup>3</sup></b> NR020												
<b>QUOTA MANAGERS</b>													
Service/Agency		Point of Contact			DSN Telephone		Commercial Telephone			Email Address			
Air Force		Kathy Crittenden			487-3191		210-652-3191			<a href="mailto:Kathy.crittenden@randolph.af.mil">Kathy.crittenden@randolph.af.mil</a>			
Army		Jim Coats			225-5914		703-695-5914			<a href="mailto:James.coats@hqda.army.mil">James.coats@hqda.army.mil</a>			
DIA		Clarence Inge			428-4234		202-231-2794			<a href="mailto:Clarence.inge@dia.mil">Clarence.inge@dia.mil</a>			
DOE		Molly Saenz			NA		505-845-5257			<a href="mailto:msaenz@doeal.gov">msaenz@doeal.gov</a>			
Foreign Students		Neil Sheridan			NA		202-588-6710			<a href="mailto:Nsharida@moduk.org">Nsharida@moduk.org</a>			
Navy		Monique Cover			564-2996x3610		757-444-2996x3610			<a href="mailto:Monique.cover@navy.mil">Monique.cover@navy.mil</a>			
NGA		DJ Stone			693-4094		314-263-4094			<a href="mailto:Stonedj@nima.mil">Stonedj@nima.mil</a>			
NSA		Patty Cortina			224-4246		410-854-4246			<a href="mailto:jpcorti@nsa.gov">jpcorti@nsa.gov</a>			
Marines		Maj Rivenbark			263-4585		505-853-4585			<a href="mailto:Charles.rivenbark@abq.dtra.mil">Charles.rivenbark@abq.dtra.mil</a>			
DTRA		TSgt Harris			427-4570		703-767-4570			<a href="mailto:Anita.harris@dtra.mil">Anita.harris@dtra.mil</a>			
All Others		MSgt Sill			246-5666		505-846-5666			<a href="mailto:Harold.sill@abq.dtra.mil">Harold.sill@abq.dtra.mil</a>			



# DNWS In-Residence Courses





**Class Length:**

3 days (24 hours)

**Class Dates:**

14-16 Feb 05,  
16-18 May 05

Supports UJTL OP 7.4  
(Coordinated Consequence  
Management in the JOA)

Level of Learning Achievement:  
Analysis

# Consequence Assessment Tool Set (CATS) Advanced Course

Course Number: DNWS-R021

CBRNE/Homeland Defense Training

## Objectives

- Understand the CATS concept, components, use, challenges, and limitations
- Achieve a greater understanding of model input methodology
- Understand and run technology models
- Achieve more experience in creating, navigating, and briefing CATS scenarios
- Import a hazard footprint into CATS from programs such as ALOHA and HPAC
- Analyze population at risk and the population affected for a given hazard incident
- Analyze the probable damage to housing and infrastructure within a hazard area
- Analyze and determine roadblocks at a hazard event
- Understand the extended collateral damage application in CATS
- Develop and brief advanced CATS scenarios

## Content

- CATS options and customization
- Advanced CATS concepts, components, challenges, and limitations
- Advanced CATS functions
- Constraint and uncertainty analysis
- Extended collateral damage application in CATS

## Format

Instructor presentations and computer based exercises

## Faculty

DNWS staff

## Who Should Attend

Military and government civilians who have completed the basic CATS course, have 6 or more months of CATS experience and have the need to use advanced CATS features.

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None

## Time and Location

Report to DNWS at 0730 on class start date

## Appropriate Dress

USA: Class B

USMC: Service B/C

Civilians: Business Casual

USN: Khaki/Working Whites/Blues (E)

USAF: Light Blue Shirt



**Class Length:**  
3 days (24 hours)

**Class Dates:**  
1-3 Nov 04,  
24-26 Jan 05,  
28-30 Mar 05,  
18-20 Apr 05,  
27-29 Jun 05,  
18-20 Jul 05,  
22-24 Aug 05,  
19-21 Sep 05

Supports UJTL OP 7.4  
(Coordinated Consequence  
Management in the JOA)

Level of Learning  
Achievement: Comprehension

# Consequence Assessment Tool Set (CATS) Basic Course

Course Number: DNWS-R020  
CBRNE/Homeland Defense Training

## Objectives

- Be familiar with the CATS concept, components, use, challenges, and limitations
- Understand model input methodology
- Be able to run technology models
- Be able to create, navigate, as well as open and close a CATS scenario
- Import a hazard footprint into CATS from programs such as ALOHA and HPAC
- Assess population at risk and the population affected for a given hazard incident
- Assess the probable damage to housing and infrastructure within a hazard area
- Determine roadblocks at a hazard event

## Content

- Overview of CATS graphical user interface
- Primers on hazard area tool, rapid hazard analysis tool, and hazard origin tool with ALOHA
- Interpretation of CATS reports
- Primer on the technology models
- Use of the HPAC Program with CATS
- Exercises on the various CATS scenarios
- Extended collateral damage application in CATS
- CATS advanced functions

## Format

Instructor presentations and computer based exercises

## Faculty

DNWS staff

## Who Should Attend

Military and government civilians who need to be able to use CATS. Requires basic computer skills.

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None

## Time and Location

Report to DNWS at 0730 on class start date

## Appropriate Dress

USA: Class B

USMC: Service B/C

Civilians: Business Casual

USN: Khaki/Working Whites/Blues (E)

USAF: Light Blue Shirt





**Class Length:**  
4 days (32 hours)

**Class Dates:**  
8-11 Feb 05,  
10-13 May 05

Supports UJTL OP 7.4  
(Coordinate Consequence  
Management (CM) in the  
JOA).

Level of Learning Achievement:  
Analysis

This course is certified for  
joint training in accordance  
with CJCSM 3500.03A,  
Joint Training Manual

# Hazard Prediction and Assessment Capability (HPAC) 4.0.x Advanced Course

Course Number: DNWS-R018  
CBRNE/Homeland Defense Training

## Objectives

- Understand the HPAC user interface, capabilities, and limitations
- Achieve a better understanding of the HPAC programs, uses, inputs, and outputs
- Achieve more experience in creating, analyzing, and briefing HPAC scenarios
- Understand manual (nondefault) inputs and understand the limitations and risks associated with their use
- Be able to integrate HPAC output with other software programs

## Content

- HPAC options and customization
- Advanced weather topics, manual weather input, weather file formats, and options
- Advanced use of the chemical/biological incident editor with exercises
- Advanced use of the nuclear weapon incident editor with exercises
- Constraint and uncertainty analysis
- NBC reporting program

## Format

Facilitated discussions and lectures supported by computer based exercises

## Faculty

DNWS Staff

## Who Should Attend

Military and federal employees who have completed HPAC Basic, have 6 or more months of HPAC experience, and have a need to use advanced HPAC features.

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual



**Class Length:**  
4 days (32 hours)

**Class Dates:**  
26-29 Oct 04,  
18-21 Jan 05,  
22-25 Mar 05,  
12-15 Apr 05,  
21-24 Jun 05,  
12-15 Jul 05,  
16-19 Aug 05,  
13-16 Sep 05

Supports UJTL OP 7.4  
(Coordinate Consequence  
Management (CM) in the  
JOA).

Level of Learning Achievement:  
Comprehension

This course is certified for joint  
training in accordance with  
CJCSM 3500.03A, Joint Training  
Manual

# Hazard Prediction and Assessment Capability (HPAC) 4.0.x Basic Course

Course Number: DNWS-R017  
CBRNE/Homeland Defense Training

## Objectives

- Be familiar with the HPAC concepts, components, challenges, and limitations
- Understand model input methodology
- Be able to navigate through each of the HPAC modules
- Understand the different HPAC weather inputs
- Understand how terrain affects HPAC model results
- Understand how wind fields relate to altitudes and HPAC results
- Using basic parameters, produce outputs for consequence assessment

## Content

- Overview of HPAC and the HPAC Graphical User Interface (GUI)
- Primers on chemical, biological, and nuclear weapons
- Weather terms, definitions, data types, and the HPAC weather GUI
- Interpretation of HPAC analysis plots and tables
- Common HPAC warning and error messages
- Exercises on the various scenarios that can be modeled with HPAC

## Format

Facilitated discussions and lectures supported by computer based exercises

## Faculty

DNWS Staff

## Who Should Attend

Military and federal employees who have consequence management responsibilities and possess basic computer skills

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USMC: Service B/C

Civilians: Business Casual

USN: Khaki/Working Whites/Blues (E)

USAF: Light Blue Shirt



**Class Length:**  
9 days (72 hours)

**Class Dates:**  
24 Jan-3 Feb 05,  
21-31 Mar 05,  
6-16 Jun 05,  
25 Jul-4 Aug 05,  
12-22 Sep 05

Supports UJTLs TA 7 (Operate in a CBRNE Environment) and TA 7.1 (Conduct Mission Operations in a CBRNE Environment).

Level of Learning Achievement:  
Apply

This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training Manual

# Joint Nuclear Explosive Ordnance Disposal Course (JNEODC)

Course Number: DNWS-R006  
Radiological/Nuclear Response Training

## Objectives

- Describe active stockpile weapons and associated delivery systems
- Identify the number and location of active/inactive stockpile weapons
- Identify hazardous and classified active/inactive stockpile weapons components
- Describe the possible configurations of active stockpile weapons
- Describe nonviolent disablement of active stockpile weapons
- Identify the transportation modes, storage configuration, and retirement schedule of inactive stockpile weapons
- Identify DoD and DOE response capabilities to accidents
- Identify EOD responsibilities in response to accidents and weapons recovery operations
- Describe basic nuclear physics, biological effects, and protection from radiation exposure
- Demonstrate setup and operation of an emergency contamination control station
- Demonstrate use of radioactivity monitoring instruments
- Explain radiation dosimetry and the use of a dosimeter
- Demonstrate the ability to properly don anti-C clothing and procedures for cleaning, inspecting, and proper wear of respiratory protection

## Content

- Detailed sustainment training for military personnel in nuclear EOD operations
- Emphasis on nuclear weapons design information including nuclear physics, safety, component subsystems, and identification features
- Detailed component familiarization
- General foreign systems information
- Consideration of radiation effects, potential hazards, and protection methods
- Processes involved in emergency contamination control station operations
- Scope of actions of an initial response force EOD team member

## Format

Facilitated discussions and lectures supported by video presentations, weapon cutaways, a WDA tour, and a field exercise

## Faculty

Sandia National Laboratories and DOE instructors as well as DNWS staff

## Who Should Attend

Military EOD technicians (E-4 and above) currently filling an operational EOD position who are graduates of Naval School Explosive Ordnance Disposal Nuclear Ordnance Division

## Registration

Registration form must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

DoD secret clearance with CNWDI or DOE "Q" Clearance with Sigmas 1-5 (see page 5 for details.)

## Time and Location

Report to Sandia National Laboratories Badge Office (Building 800, Kirtland AFB) at 0715 on class start date. An escort will lead the class to Building 892, Room 190A.

## Appropriate Dress

BDUs or utility uniform.





### Class Length:

1-2 days  
(8-12 hrs)

### Class Dates:

9-10 Mar 05,  
21-22 Sep 05 (MTT)

Supports UJTL SN 3.4.8  
(Coordinate Nuclear  
Surety).

Level of Learning  
Achievement: Knowledge

This course is certified for joint  
training in accordance with  
CJCSM 3500.03A, Joint Training  
Manual

# Joint DoD-DOE/NNSA Nuclear Surety Executive Course (JNSEC)

Course Number: DNWS-R009

Nuclear Core Competency Training

## Objectives

- Establish a training program on nuclear weapons surety for senior-level personnel
- Provide an overview of the nuclear weapons surety environment to include the functional areas of safety, security, and control as well as the U.S. nuclear stockpile and stockpile processes

## Content

- An overview of nuclear weapons surety
- A review of nuclear weapons design principles
- The composition of the current stockpile
- The nuclear weapons safety, security, and control environments
- The DOE/NNSA transportation equipment and procedures (Albuquerque location only)
- The nuclear weapons lifecycle
- A discussion of current issues that effect the surety of the nuclear stockpile
- Tour of the Weapons Display Area (WDA) (Albuquerque location only)

## Format

Facilitated discussions and lectures (WDA tour conducted at DNWS)

## Faculty

DNWS Staff and subject-matter experts

## Who Should Attend

Senior military and federal employees who have nuclear weapons responsibilities.

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date. JNSEC is offered as mobile training in the Washington DC area. Registration procedures for the MTT iteration will be explained in the invitation package. Direct all questions to DNWS Student Services.

## Security Requirements

DoD secret clearance with CNWDI or DOE "Q" clearance with Sigmas 1-5 (see page 5 for details.)

## Time and Location

Report to the DNWS at 0730 on class start date. Washington DC area report 0700.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual



**Class Length:**  
5 days (40 hours)

**Class Dates:**  
6-10 Dec 04 (MTT),  
4-8 Apr 05,  
11-15 Jul 05  
TBD Sep 05 (MTT)

Supports UJTIs SN 5.2.3  
(Review Operational  
Plans), SN 9.2.2  
(Coordinate  
Consequence  
Management), and ST  
5.3.4 (Prepare and  
coordinate Theater  
Strategy, Campaign Plans,  
or Operational Plans and  
Orders).

Level of learning  
Achievement: Application

# Joint Planners Course (JPC) For Combating WMD

Course Number: R022  
Radiological/Nuclear Response Training

## Objectives

- Develop planning skills to review, revise, and coordinate COCOM-level plans related to combating WMD use
- Become familiar with and be able to use and apply:
  - U.S. policies
  - Doctrine and operational guidance
  - CBRN current threat, delivery means, and effects
  - Planning process and considerations required to develop WMD elements of OPLANs, CONPLANs, and annexes
  - Planning considerations for and uses of military and other U.S. government assets available in a CBRN environment

## Content

- Weapons elimination operations
- Force protection (CBRN defense)
- U.S. nuclear operations
- Consequence management
- Foreign consequence management
- Nonproliferation
- Counter-proliferation
- JOPES, as it applies to CBRN planners

## Format

Facilitated discussions and lectures supported by video presentations and a planning exercise

## Faculty

DNWS staff and subject matter experts

## Who Should Attend

Military personnel and Federal employees (O-4 through O-6 or equivalent grade) occupying WMD planning positions.

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

DoD secret clearance (see page 5 for details)

## Time and Location

Report to the DNWS or designated Washington DC location at 0730 on class start date.

## Appropriate Dress

USA: Class B

USMC: Service B/C

Civilians: Business Casual

USN: Khaki/Working Whites/Blues (E)

USAF: Light Blue Shirt



**Class Length:**  
5 days (40 hours)

**Class Dates:**  
18-22 Oct 04,  
1-5 Nov 04,  
24-28 Jan 05,  
21-25 Mar 05,  
4-8 Apr 05,  
20-24 Jun 05,  
5-9 Sep 05

Supports UJTLs SN 3.2.4  
(Manage Strategic Weapon  
Stockpile) and SN 3.4.8  
(Coordinate Nuclear Surety).

Level of Learning  
Achievement: Knowledge

# Nuclear Weapons Orientation Course (NWOC)

Course Number: DNWS-R001  
Nuclear Core Competency Training

## Objectives

- Evaluate the scope of the national nuclear weapons program
- Explain basic nuclear physics and materials
- Identify key elements of nuclear surety
- Evaluate future development, testing, command and control, and weapons effects from stockpiled nuclear weapons
- Review intelligence estimates and international agreements concerning nuclear weapons
- Discuss current nuclear weapons issues

## Content

- An overview of the U.S. nuclear weapons program
- Issues and challenges facing the program today
- The functional areas of nuclear weapons fundamentals, nuclear weapons effects, nuclear weapons stockpile, and nuclear weapons issues
- Themes of safety, security, operational effectiveness, and proliferation concerns
- Tour of the classified Weapons Display Area

## Format

Facilitated discussions and lectures supported by video presentations, weapon cutaways, and a WDA tour.

## Faculty

DNWS staff

## Who Should Attend

Military (E-5 and above) and government civilians (GS-7 and above) who require knowledge of the national nuclear weapons program.

## Registration

Registration information must be received by student services a minimum of 15 working days prior to class start date.

## Security Requirements

DoD Secret clearance with RD/CNWDI or DOE "Q" clearance with Sigmas 1-5 (see page 5 for details.)

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual



### Class Length:

4 ½ days (36 hours)

### Class Dates:

6-10 Dec 05,  
14-18 Mar 05,  
6-10 Jun 05

Supports UJTL ST 9.1 (Integrate Efforts to Counter Weapons and Technology Proliferation In Theater).

Level of Learning  
Achievement: Comprehension

This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training Manual

# Proliferation, Terrorism, and Response Course (PTRC)

Course Number: DNWS-R010

CBRNE/Homeland Defense Training

## Objectives

- Understand WMD and their means of delivery
- Examine past and current international efforts to halt the spread of WMD
- Define DoD's role in countering proliferation and planning operations
- Describe nuclear warhead designs most likely to be used by proliferant nations
- Describe physical principles, types, variations, design parameters, effects, and modes of delivery of various chemical and biological weapons
- Identify worldwide WMD proliferation threats
- Identify international and domestic terrorist threats and U.S. capabilities to respond

## Content

- An overview of chemical, biological, radiological, nuclear, and high explosive (CBRNE) means of delivery
- Discuss U.S. nonproliferation efforts
- Review the threat posed by nations possessing or seeking CBRNE capabilities
- Examine ballistic and cruise missile programs of proliferant nations and their effect on proliferation of CBRNE
- Explore U.S. counter proliferation policy and response efforts
- Classes are organized into five areas: Nuclear weapons, chemical and biological weapons, counter proliferation policy, CBRNE terrorism, and U.S. response capabilities
- Participate in a computer-based interactive proliferation exercise

## Format

Facilitated discussions and lectures supported by a Weapons Display Area tour and a group exercise

## Faculty

DNWS Staff and subject-matter experts

## Who Should Attend

Military (E-7 and above) and Federal employees (GS-7 and above) with responsibilities related to the proliferation threat and U.S. responses

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

DoD Secret clearance with RD/CNWDI or DOE "Q" clearance with Sigmas 1-5 (see page 5 for details)

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual





**Class Length:**  
5 days (40 hours)

**Class Dates:**  
29 Nov-3 Dec 04,  
7-11 Feb 05,  
18-22 Apr 05,  
23-27 May 05,  
25-29 Jul 05,  
19-23 Sep 05

Supports UJTLs OP 4.7.8 (Establish Disaster Control Measures), OP 7.3 (Coordinate Passive NBC Defense in the JOA), OP 7.4 (Coordinate Consequence Management (CM) in the JOA) and OP 7.5 (Integrate JOA Intelligence, Surveillance, Reconnaissance (ISR) with CBRNE Situation), SN 9.2.2 (Coordinate Consequence Management), and TA 7.1 (Conduct Mission Operations in a CBRNE Environment).

Level of Learning  
Achievement: Application

This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training Manual

# Radiological Accident Command, Control, and Coordination (RAC<sup>3</sup>) Course

Course Number: DNWS-R003  
Radiological/Nuclear Response Training

## Objectives

- Discuss the history of nuclear weapons accidents and lessons learned
- Describe potential hazards associated with radiological accidents
- Identify DoD radiological accident response capabilities
- Discuss state and local radiological accident response capabilities
- Identify legal issues associated with a radiological accident
- Demonstrate command, control, and coordination in computer simulated exercises

## Content

- Delineates responsibilities during radiological weapons accident response and offers problem resolution techniques
- Defines Federal, state, and local agency responsibilities
- Explores key issues specific to a radiological accident
- Contributes in practical exercises with intermittent review of decision making
- Participates in computer-based scenario of a realistic radiological accident

## Format

Facilitated discussions and lectures supported by video presentations, computer based exercises, and a WDA tour

## Faculty

DNWS Staff and subject matter experts

## Who Should Attend

Military personnel (E-7 to O-6) and Federal employees (GS-9 and above) who have a responsibility to respond to radiological incidents

## Registration

Registration form must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None.

DoD secret clearance RD/CNWDI or DOE "Q" clearance with Sigmas 1-5 is required for the optional WDA tour (see page 5 for details.)

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual



**Class Length:**  
9 days (72 hours)

**Class Dates:**  
18-28 Oct 04,  
29 Nov-9 Dec 04,  
28 Feb-10 Mar 05,  
4-14 Apr 05,  
2-12 May 05,  
8-18 Aug 05

Supports UJTLs TA 7 (Operate in a CBRNE Environment) and TA 7.1 (Conduct Mission Operations in a CBRNE Environment).

Level of Learning Achievement: Analysis

This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training Manual

# Radiological Emergency Team Operations (RETOPS) Course

Course Number: DNWS-R005

Radiological/Nuclear Response Training

## Objectives

- Describe basic nuclear physics, biological effects, and protection from radiation exposure
- Identify potential hazards and explain personal protection applications
- Describe Federal response plans and the requirement for a military response
- Demonstrate use of radioactivity monitoring instruments
- Explain radiation dosimetry and the use of a dosimeter
- Identify principles for collecting radioactive airborne samples
- Demonstrate accident patterns and plotting
- Demonstrate the ability to properly don anti-C clothing and procedures for cleaning, inspecting, and proper wear of respiratory protection
- Demonstrate setup and operation of a contamination control station

## Content

- Discussions of weapons related accidents with response plans and capabilities
- Consideration of radiation effects, potential hazards, and protection methods
- Assessment of accident patterns and plotting
- Knowledge of radiation detection equipment
- Discussions of radiological dispersal devices
- Processes involved in contamination control station operations
- Scope of actions as a radiological emergency team member

## Format

Facilitated discussions and lectures supported by video presentations, field exercises, and a Weapons Display Area tour

## Faculty

DNWS Staff and subject matter experts

## Who Should Attend

Military personnel and Federal employees occupying EOD, readiness, or other emergency response force positions

## Registration

Registration form must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None.

DoD secret clearance RD/CNWDI or DOE "Q" clearance with Sigmas 1-5 is required for the optional WDA tour (see page 5 for details.)

## Medical Requirements

Special medical requirements for civilian attendees are IAW Sections 1 and 2, Part A of Appendix C, 29 CFR 1910.134(e), which requires proof that the registrant has been medically evaluated and cleared by a licensed physician (board certified internal or occupational health) to wear a full-face, negative pressure, air purifying respirator (i.e., MCU2P or M40 protective mask). Certification of medical clearance must be included as part of registration.

## Time and Location

Report to DNWS at 0730 on class start date.

## Appropriate Dress

Military: BDUs or utility uniform

Civilians: business casual

Bring comfortable clothing for field exercises (i.e., PT gear). Students who wear eye glasses should bring inserts for MCU2P/M40 series protective masks.



### Class Length:

4 1/2 days (36 hours)

### Class Dates:

7-11 Feb 05,  
1-4 Aug 05

Supports UJTLs ST 3.1 (Process Theater Strategic Targets), ST 3.1.3 (Conduct Theater Combat Assessment), ST 5.3.1 (Conduct Strategic Estimates), and ST 9.2 (Coordinate Counterforce Operations in Theater).

Level of Learning  
Achievement: Analysis

This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training Manual

# Theater Nuclear Operations Course (TNOC)

Course Number: DNWS-R013

Nuclear Core Competency Training

## Objectives

- Describe delivery capabilities and limitations of nuclear weapons systems
- Discuss nuclear effects and desired damage consequences
- Evaluate the basic tenets for making informed nuclear weapons employment recommendations to commanders
- Describe basic targeting concepts
- Identify required planning, coordination, and time lines
- Demonstrate the mechanics of theater nuclear target analysis in accordance with Joint Publication 3-12.2

## Content

- Training for staff nuclear planners from each of the services for joint operations and targeting
- Discussions on basic targeting concepts
- Considerations of the mechanics of target analysis based on Joint Pub 3-12.2
- The mechanics of theater nuclear target analysis
- Discuss nuclear weapon employment options; delivery capabilities and limitations; nuclear effects and desired damage consequences; and required planning, coordination, and time lines

## Format

Facilitated discussions and lectures supported by practical exercises and a WDA tour

## Faculty

DNWS Staff, Joint Staff, United States Army Nuclear and Chemical Agency (USANCA), USSTRATCOM, DIA, and subject matter experts

## Who Should Attend

Military and Federal employees who are theater-level planners, support staff, targeteers, and nuclear staff planners (through O-5), and GS equivalent

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

DoD secret clearance with RD/CNWDI, or DOE "Q" clearance with Sigmas 1-5 (see page 5 for details.)

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual



**Class Length:**  
4 days (32 hours)

**Class Dates:**  
15-18 Nov 04,  
24-27 Jan 05,  
16-19 May 05,  
1-4 Aug 05

Supports UJTIs OP 4.5.3 (Recommend Evacuation Policy and Procedures for the Joint Operations Area (JOA)), OP 4.7.8 (Establish Disaster Control Measures), OP 7.4 (Coordinate Consequence Management (CM) in the JOA), OP 7.5 (Integrate JOA Intelligence, Surveillance, and Reconnaissance (ISR) with CBRNE Situation), SN 9.2.1 (Coordinate CBRNE Protection for Strategic Forces and Means), and SN 9.2.2 (Coordinate Consequence Management).

Level of Learning Achievement: Comprehension

This course is certified for joint training in accordance with CJCSM 3500.03A, Joint Training Manual

# Weapons of Mass Destruction Command, Control, and Coordination (WMDC<sup>3</sup>) Course

Course Number: DNWS-R016  
CBRNE/Homeland Defense Training

## Objectives

- Provide an overview of current potential WMD threats and vulnerabilities to the Continental U.S. in terms of federal homeland defense and DoD anti-terrorism/force protection
- Introduce and detail the relevant aspects of laws, Federal plans, DoD directives, policies, and guidance that affect DoD's role in CONUS CBRNE disaster response
- Compare roles and responsibilities of key government agencies responsible for mitigating WMD incidents
- Examine DoD role in WMD incident response, homeland defense and command structures, integration with Federal response and agencies, and deployable DoD assets
- Analyze significant critical decision points for WMD incidents on and contiguous to a military installation
- Apply procedures for requesting DoD WMD response assets for application in a Federal WMD consequence management response
- Provide tools to installation commanders and Federal agency executives for requesting/applying DoD response assets into their local plans

## Content

- Discussions of potential WMD threats and vulnerabilities to CONUS populace and infrastructure
- Overview of CBRNE threats, specifically basic courses in CBRNE characteristics, threat, weaponization, proliferation concerns, and effects
- An overview of Executive Orders, Presidential Decision Directives, Federal statutes, and DoD directives pertaining to CBRNE disaster response and consequence management operations
- An overview of DoD WMD response assets, capabilities, time lines, and limitations
- Discussion of legal, public affairs, psychological aspects, characteristics of WMD incident response
- A computer-based scenario of a realistic WMD event designed to reinforce Federal and DoD plans and agencies into installation and Federal agency response plans

## Format

Facilitated discussions and lectures supported by computer-based exercises

## Faculty

DNWS Staff, subject-matter experts, speakers from FBI, FEMA, Dept of Homeland Security, USNORTHCOM

## Who Should Attend

Commanders and their support staff and Federal, state, and local authorities that have decision-making responsibilities during WMD incidents

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USMC: Service B/C

Civilians: Business Casual

USN: Khaki/Working Whites/Blues (E)

USAF: Light Blue Shirt



# Mobile Training Courses





**Class Length:**  
3-5 days (24-40 hours)

**Class Dates:**  
26-28 Oct 04,  
13-17 Dec 04,  
11-13 Jan 05,  
1-3 Mar 05,  
5-7 Apr 05,  
10-12 May 05,  
21-23 Jun 05,  
30 Aug-1 Sep 05

Supports UJTLs OP 4.7.8 (Establish Disaster Control Measures), OP 7.3 (Coordinate Passive NBC Defense in the JOA), OP 7.4 (Coordinate Consequence Management (CM) in the JOA), OP 7.5 (Integrate JOA Intelligence, Surveillance, Reconnaissance (ISR) with CBRNE Situation), and TA 7.1 (Conduct Mission Operations in a CBRNE Environment) and SN 9.2.2 (Coordinate Consequence Management).

Level of Learning  
Achievement: Application

# Commander and Staff Radiological Accident Response (CASRAR) Workshop

Course Number: DNWS-NR002  
Radiological/Nuclear Response Training

## Objectives

- Describe potential hazards associated with radiological accidents
- Characterize the history of radiological accidents and lessons learned
- List DoD authorities as described in the *Nuclear Weapons Accident Response Procedure Manual*, DoD 3150.8-M
- Identify key responsibilities of DoD, DOE, and FEMA as indicated in the *Federal Radiological Emergency Response Plan*
- Understand DoD's configuration in response to nuclear weapons accidents and radiological emergencies
- Identify security issues affecting command staffs
- Discuss public affairs issues that affect recommendations to the commander

## Content

- Training on command responsibilities during a radiological weapons accident response
- Federal, state, and local agencies responsibilities
- Consolidation of procedural guidance and technical information needed to prepare DoD forces to respond to radiological accidents and to coordinate with other responding agencies

## Format

Facilitated discussions and lectures supported by video presentations, case studies, and a computer based exercise

## Faculty

DNWS Staff and subject matter experts

## Who Should Attend

Commanders and their support staff who have a responsibility to respond to radiological incidents

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

None

## Time, Location, and Appropriate Dress

Determined by the requesting organization



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.

**Class Length:**

3-5 days (24-40 hours)

**Class Dates:**

4-8 Oct 04,  
 28 Mar-1 Apr 05,  
 25-29 Apr 05,  
 23-27 May 05,  
 20-24 Jun 05,  
 25-29 Jul 05,  
 22-26 Aug 05,  
 26-30 Sep 05

Supports UJTLs OP 4.5.3 (Recommend Evacuation Policy and Procedures for the Joint Operations Area (JOA)), OP 4.7.8 (Establish Disaster Control Measures), OP 7.4 (Coordinate Consequence Management (CM) in the JOA) and OP 7.5 (Integrate JOA Intelligence, Surveillance, and Reconnaissance (ISR) with CBRNE Situation) SN 9.2.2 (Coordinate Consequence Management).

Level of Learning  
 Achievement: Synthesis

# Civil Support Team Radiological Training Course (CST-RTC)

Course Number: DNWS-NR019

Radiological/Nuclear Response Training

**Objectives**

- Analyze significant critical decision points for radiological accidents/incidents
- Demonstrate the use of radioactivity monitoring instruments
- Identify principles for collecting airborne radioactivity samples
- Demonstrate methods of surveying a post-radiological dispersal device event or lost radioactive source
- Demonstrate contamination control station techniques using existing equipment
- Demonstrate command, control, and coordination in tabletop and/or field exercises
- Review current modeling software and DTRA reachback capabilities
- Explain the medical aspects of exposure to ionizing radiation
- Demonstrate procedures for handling patients contaminated with radioactivity
- Demonstrate capabilities of the Unified Command Suite

**Content**

(Content for this course is dependent on host organization's needs.)

- Discussions of weapons related accidents with response plans and capabilities
- Considerations of radiation effects, potential hazards, and protection methods
- Assessment of accident patterns and plotting
- Knowledge of radiation detection equipment
- Processes involved in contamination controls station operations
- Scope of actions as a radiological emergency team member

**Format**

Facilitated discussions and lectures supported by video presentations and field exercises

**Faculty**

DNWS Staff and subject matter experts

**Who Should Attend**

WMD-CST teams and local civilian initial response teams wanting specific training in radiological events

**Registration**

Registration forms must be received by student services a minimum of 15 working days before class start date.

**Security Requirements**

None

**Medical Requirements**

Special medical requirements for civilian attendees are IAW Sections 1 and 2, Part A of Appendix C, 29 CFR 1910.134(e), which requires proof that the registrant has been medically evaluated and cleared by a licensed physician (board certified internal or occupational health) to wear a full-face, negative pressure, air purifying respirator (i.e., MCU2P or M40 protective mask). Certification of medical clearance must be included as part of registration.

**Time and Location**

For resident class report to the DNWS at 0730 on the class start date.

**Appropriate Dress**

Military: BDUs or utility uniform

Civilians: business casual

Bring comfortable clothing for field exercises (i.e., PT gear). Students who wear eye glasses should bring inserts for MCU2P/M40 series protective masks.



This course is offered in-house as well as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.



**Class Length:**  
3 days (24 hours)

**Class Dates:**  
5-7 Oct 04,  
15-17 Nov 04,  
14-16 Dec 04,  
11-13 Jan 05,  
14-18 Feb 05,  
16-20 May 05,  
1-5 Aug 05,  
27-29 Sep 05

Supports UJTLs SN 3.2.4  
(Manage Strategic  
Weapon Stockpile) and SN  
3.4.8 (Coordinate Nuclear  
Surety).

Level of Learning  
Achievement: Knowledge

# Nuclear Weapons Familiarization Seminar (NWFS)

Course Number: DNWS-NR017  
Nuclear Core Competency Training

## Objectives

- Evaluate the scope of the national nuclear weapons program
- Explain basic nuclear physics and materials
- Identify key elements of nuclear surety
- Evaluate future development, testing, command and control, and weapons effects from stockpiled nuclear weapons
- Review intelligence estimates and international agreements concerning nuclear weapons
- Discuss current nuclear weapons issues

## Content

- An overview of the U.S. nuclear weapons program
- Issues and challenges facing the program today
- The functional areas of nuclear weapons fundamentals, nuclear weapons effects, nuclear weapons stockpile, and nuclear weapons issues
- Themes of safety, security, operational effectiveness, and proliferation concerns

## Format

Facilitated discussions and lectures supported by video presentations

## Faculty

DNWS Staff

## Who Should Attend

Determined by the requesting organization

## Registration and Security Requirements

Determined by the requesting organization

## Time, Location, and Appropriate Dress

Determined by the requesting organization



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.





**Class Length:**  
4 ½ days (36 hours)

**Class Dates:**  
26-30 Sep 05

Supports UJTL ST 9.1  
(Integrated Efforts to  
Counter weapons and  
Technology Proliferation In  
Theater).

Level of Learning  
Achievement:  
Comprehension

# Proliferation, Terrorism, and Response Staff Course (PTRSC)

Course Number: DNWS-NR010  
CBRNE/Homeland Defense Training

## Objectives

- Understand WMD and their means of delivery
- Examine past and current international efforts to halt the spread of WMD
- Define DoD's role in countering proliferation and planning operations
- Describe nuclear warhead designs most likely to be used by proliferant nations
- Describe physical principles, types, variations, design parameters, effects, and modes of delivery of various chemical and biological weapons
- Identify worldwide WMD proliferation threats
- Identify international and domestic terrorist threats and U.S. capabilities to respond

## Content

- An overview of chemical, biological, radiological, nuclear, and high explosive (CBRNE) means of delivery
- Discuss U.S. nonproliferation efforts
- Review the threat posed by nations possessing or seeking CBRNE capabilities
- Examine ballistic and cruise missile programs of proliferant nations and their effect on proliferation of CBRNE
- Explore U.S. counter proliferation policy and response efforts
- Classes are organized into five areas: Nuclear weapons, chemical and biological weapons, counter proliferation policy, CBRNE terrorism, and U.S. response capabilities

## Format

Facilitated discussions and lectures support

## Faculty

U.S. government subject-matter experts

## Who Should Attend

Military (E-7 and above) and Federal employees (GS-7 and above) with responsibilities related to the proliferation threat and U.S. responses

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

DoD secret clearance with RD/CNWDI or DOE "Q" clearance with Sigmas 1-5 (see page 5 for details)

## Time and Location

TBD

## Appropriate Dress

USA: Class B

USMC: Service B/C

Civilians: Business Casual

USN: Khaki/Working Whites/Blues (E)

USAF: Light Blue Shirt



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.



### Class Length:

3-5 days  
(24-40 hours)

### Class Dates:

8-12 Nov 04,  
17-21 Jan 05,  
14-18 Feb 05

Supports UJTLs TA 7 (Operate in a CBRNE Environment) and TA 7.1 (Conduct Mission Operations in a CBRNE Environment).

Level of Learning Achievement: Application

# Radiological Emergency Team Orientation (RETOR) Course

Course Number: DNWS-NR005

Radiological/Nuclear Response Training

## Objectives

- Describe basic nuclear physics, biological effects, and protection from exposure to radiation
- Identify potential hazards and explain personal protection applications
- Describe Federal response plans and the requirements for a military response
- Demonstrate the use of radioactivity monitoring instruments
- Explain radiation dosimetry and the use of a dosimeter
- Identify principles for collecting radioactive airborne samples
- Demonstrate accident patterns and plotting
- Demonstrate the ability to properly don anti-C clothing and procedures for cleaning, inspecting, and proper wear of respiratory protection
- Demonstrate setup and operation of a contamination control station

## Content

(Content for this course is dependent on host organization's needs.)

- Discussions of weapons related accidents with response plans and capabilities
- Considerations of radiation effects, potential hazards, and protection methods
- Assessment of accident patterns and plotting
- Knowledge of radiation detection equipment
- Discussions of radiological dispersal devices
- Processes involved in contamination control station operations
- Scope of actions as a radiological emergency team member

## Format

Determined by the requesting organization

## Faculty

DNWS Staff and subject-matter experts

## Who Should Attend

Determined by the requesting organization

## Registration and Security Requirements

Determined by the requesting organization

## Medical Requirements

Special medical requirements for civilian attendees are IAW Sections 1 and 2, Part A of Appendix C, 29 CFR 1910.134(e), which requires proof that the registrant has been medically evaluated and cleared by a licensed physician (board certified internal or occupational health) to wear a full-face, negative pressure, air purifying respirator (i.e., MCU2P or M40 protective mask). Certification of medical clearance must be included as part of registration.

## Time and Location

To be determined by requesting organization

## Appropriate Dress

Bring comfortable clothing for field exercises (i.e., PT gear). Students who wear eye glasses should bring inserts for MCU2P/M40 series protective masks.



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.



**Class Length:**  
4 <sup>1</sup>/<sub>2</sub> days (36 hours)

**Class Dates:**  
18-22 Apr 05  
15-19 Aug 05

Supports UJTLs ST 3.1 (Process Theater Strategic Targets), ST 3.1.3 ( ), ST 5.3.1 (Conduct Strategic Estimates), and ST 9.2 (Coordinate Counterforce Operations in Theater).

Level of Learning  
Achievement: Analysis

# Theater Nuclear Operations Staff Course (TNOSC)

Course Number: DNWS-NRO13  
Nuclear Core Competency Training

## Objectives

- Describe delivery capabilities and limitations of nuclear weapons systems
- Discuss nuclear effects and desired damage consequences
- Evaluate the basic tenets for making informed nuclear weapons employment recommendations to commanders
- Describe basic targeting concepts
- Identify required planning, coordination, and time lines
- Demonstrate the mechanics of theater nuclear target analysis in accordance with Joint Publication 3-12.2

## Content

- Training for staff nuclear planners from each of the services for joint operations and targeting
- Discussions on basic targeting concepts
- Considerations of the mechanics of target analysis based on Joint Publication 3-12.2
- The mechanics of theater nuclear target analysis
- Discuss nuclear weapon employment options; delivery capabilities and limitations; nuclear effects and desired damage consequences; and required planning, coordination, and time lines

## Format

Facilitated discussions and lectures supported by practical exercises

## Faculty

DNWS Staff, Joint Staff, United States Army Nuclear and Chemical Agency (USANCA), USSTRATCOM, DIA, and subject matter experts

## Who Should Attend

Military and Federal employees who are theater-level planners, support staff, targeteers, and nuclear staff planners (through O-5), and GS equivalent

## Registration

Registration forms must be received by student services a minimum of 15 working days before class start date.

## Security Requirements

DoD secret clearance with RD/CNWDI or DOE "Q" clearance with Sigmas 1-5 (see page 5 for details.)

## Time and Location

TBD

## Appropriate Dress

USA: Class B	USN: Khaki/Working Whites/Blues (E)
USMC: Service B/C	USAF: Light Blue Shirt
Civilians: Business Casual	



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.



**Class Length:**  
3 days (23 hours)

**Class Dates:**

12-14 Oct 04,  
1-5 Nov 04,  
1-3 Dec 04,  
11-13 Jan 05,  
1-4 Feb 05,  
15-17 Mar 05,  
19-21 Apr 05,  
23-26 May 05,  
14-16 Jun 05,  
25-28 Jul 05,

Supports UJTLs OP 4.5.3 (Recommend Evacuation Policy and Procedures for the Joint Operations Area (JOA)), OP 4.7.8 (Establish Disaster Control Measures), OP 7.4 (Coordinate Consequence Management (CM) in the JOA), OP 7.5 (Integrate JOA Intelligence, Surveillance, and Reconnaissance (ISR) with CBRNE Situation), TA 7.1 (Conduct Mission Operations in a CBRNE Environment), SN 9.2.1 (Coordinate CBRNE Protection for Strategic Forces and Means), and SN 9.2.2 (Coordinate Consequence Management)..

Level of Learning  
Achievement: Comprehension

# Weapons of Mass Destruction Incident Response Workshop (WMDIRW)

Course Number: DNWS-NR018  
CBRNE/Homeland Defense Training

## Objectives

- Provide an overview of current potential WMD threats and vulnerabilities to the Continental U.S. in terms of federal homeland defense and DoD antiterrorism/force protection
- Introduce and detail the relevant aspects of laws, Federal plans, DoD directives, policies, and guidance that affect DoD's role in CONUS CBRNE disaster response
- Compare roles and responsibilities of key government agencies responsible for mitigating WMD incidents
- Examine DoD role in WMD incident response, homeland defense and command structures, integration with Federal response agencies, and deployable DoD assets
- Analyze significant critical decision points for WMD incidents on and contiguous to a military installation
- Apply procedures for requesting DoD WMD response assets for application in a Federal WMD consequence management response
- Provide tools to installation commanders and Federal agency executives for requesting/applying DoD response assets into their local plans

## Content

- Course can be tailored to meet the specific content requirements needed from the requesting unit/customer
- Discussion of potential WMD threats and vulnerabilities to CONUS populace and infrastructure
- Overview of CBRNE threats, specifically basic courses in chemical/biological/radiological/nuclear/conventional explosive characteristics, threat, weaponization, proliferation concerns, and effects
- Overview of Executive Orders, Presidential Decision Directives, Federal statutes and DoD directives pertaining to CBRNE disaster response and consequence management operations
- Overview of DoD WMD response assets, capabilities, timelines, and limitations
- Discussion of legal, public affairs, and characteristics of WMD incident response
- Course can be specifically tailored for the state WMD CST with the intent to integrate training for CST leadership and their state emergency management partners.

## Format

Facilitated discussions and lectures

## Faculty

DNWS Staff , subject-matter experts, speakers from FBI, FEMA, Department of Homeland Security, USNORTHCOM, local emergency management agencies

## Who Should Attend

Determined by the requesting organization

## Registration and Security Requirements

Determined by the requesting organization

## Time, Location, and Appropriate Dress

Determined by the requesting organization



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.





**Class Length:**  
1 days (8 hours)

**Class Dates:**  
As required

Supports UJTLs OP 4.5.3 (Recommend Evacuation Policy and Procedures for the Joint Operations Area (JOA)), OP 4.7.8 (Establish Disaster Control Measures), OP 7.4 (Coordinate Consequence Management (CM) in the JOA), ST 4.2.6 (Determine Theater Residual Capabilities) and ST 9.5 (Coordinate CM In Theater).

Level of Learning Achievement: Comprehension

# Weapons of Mass Destruction Staff Support Seminar (WMDS<sup>3</sup>)

Course Number: DNWS-NR020  
CBRNE/Homeland Defense Training

## Objectives

- Provide an overview of current potential WMD threats and vulnerabilities to the Continental U.S. in terms of federal homeland defense and DoD antiterrorism/force protection
- Introduce and detail the relevant aspects of laws, Federal plans, DoD directives, policies, and guidance that affect DoD's role in CONUS CBRNE disaster response
- Compare roles and responsibilities of key government agencies responsible for mitigating WMD incidents
- Examine DoD role in WMD incident response, homeland defense and command structures, integration with Federal response agencies, and deployable DoD assets
- Analyze significant critical decision points for WMD incidents on and contiguous to a military installation
- Apply procedures for requesting DoD WMD response assets for application in a Federal WMD consequence management response

## Content

- Course can be tailored to meet the specific content requirements needed from the requesting unit/customer
- Discussion of potential WMD threats and vulnerabilities to CONUS populace and infrastructure
- Overview of CBRNE threats, specifically basic courses in chemical/biological/radiological/nuclear/conventional explosive characteristics, threat, weaponization, proliferation concerns, and effects
- Overview of Executive Orders, Presidential Decision Directives, Federal statutes and DoD directives pertaining to CBRNE disaster response and consequence management operations
- Overview of DoD WMD response assets, capabilities, timelines, and limitations

## Format

Facilitated discussions and lectures

## Faculty

DNWS Staff and subject-matter experts

## Who Should Attend

Combatant commanders and major staff elements that are expected to be familiar with major Federal policy, guidelines, plans, and processes as well as understand how DoD interacts with key command and control elements.

## Registration and Security Requirements

Determined by the requesting organization

## Time and Location

Determined by the requesting organization

## Appropriate Dress

Determined by the requesting organization



This course is only offered as mobile training. Use the samples on pages 36-38 of this catalog to request an MTT. All MTT expenses are the responsibility of the requesting organization.

# DNWS Hosted Courses





**Class Length:**  
5 days (40 hours)

**Class Dates:**  
21-25 Feb 05,  
11-15 Jul 05,

Level of Learning  
Achievement: Application

# Medical Effects of Ionizing Radiation (MEIR) Course

Course Number: DNWS-R015

## Objectives

- Illustrate the process by which radiation interacts with matter
- Describe the energies released by ionizing radiation sources and their effects on biological systems
- Explain characteristics of fallout and its hazards
- Examine methods for removal of internally deposited radioactive materials in the body
- Detail effects of blast and thermal energy release on equipment, structures, and biological systems
- Discuss causes of radiation sickness and determine appropriate treatment strategies
- Describe long-term, low-level, and chronic high-dose sublethal exposures of ionizing radiation
- Discuss medical implications of combined radiation/battlefield injuries
- Explain principles and procedures for pharmacological protection against expected radiation hazards
- Discuss documentary evidence of the effects of high-level radiation exposure, both locally and systemically, in accidental human radiation exposures

## Content

- Provides medical personnel with background material relating to human injury and combat effectiveness in a nuclear weapons detonation or accident scenario.
- Introduces physical principles of nuclear weapons and ionizing radiation, including external and internal contamination.

## Format

Facilitated discussions and lectures supported by video presentations as well as decontamination triage exercises

## Faculty

Armed Forces Radiological Research Institute (AFRRI) subject-matter experts

## Who Should Attend

Military health care providers and operational planners

## Registration

Registration for this course is administered by the AFRRI Military Medical Operations Office at (301) 295-0316 or DSN 295-0316.

## Security Requirements

None

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

USA: Class B

USN: Khaki/Working Whites/Blues (E)

USMC: Service B/C

USAF: Light Blue Shirt

Civilians: Business Casual

Utility uniforms or physical training clothing will be necessary for decontamination and triage exercises.



**Class Length:**  
15 days (80 hours)

**Class Dates:**  
11-29 Jul 05

Supports UJTLs OP 7 (Counter CBRNE Weapons in JOA), TA 7.1 (Conduct Mission Operations in a CBRNE Environment), SN 2.3.2 (Collate National Strategic Information), SN 3.2 (Manage National Strategic Firepower), SN 3.4.8 (Coordinate Nuclear Surety), and ST 9.1 (Integrate Efforts to Counter Weapons and Technology Proliferation in Theater).

Level of Learning Achievement:  
Knowledge

# Nuclear Research and Operations Officer Course (NROOC)

Course Number: DNWS-R019

## Objectives

- Develop baseline skills for new Army career field FA 52 officers
- Expose officers to the U.S. Nuclear Weapons Program
- Provide historical perspective on the U.S. nuclear weapons stockpile
- Identify key elements of nuclear surety
- Generate awareness for emerging U.S. homeland defense issues and doctrine
- Discuss current WMD issues

## Content

- An overview of the U.S. nuclear weapons program
- Issues and challenges of the program today
- Nuclear weapons stockpile and surety issues
- CBRNE weapons awareness and response doctrine
- National Test Site tour and orientation
- White Sands Missile Range tour and DTRA test program overview

## Format

Course pretest, facilitated discussions and lectures supported by video presentations, weapons cutaways, site surveys, and a WDA tour

## Faculty

WDA Staff and subject matter experts, FA 52 senior officers and associates

## Who Should Attend

Newly assigned Army FA 52 career field officers in the grades O-3 to O-5

## Registration

Registration is through USANCA at (703) 806-7866 or DSN 656-7866

## Security Requirements

DoD secret clearance with restricted data (RD) and critical nuclear weapons design information (CNWDI) access, contact USANCA for details

## Time and Location

Report to the DNWS at 0730 on class start date.

## Appropriate Dress

Class B uniform for DNWS instructional days. BDUs for field tours

## Sample MTT Request Letter

[Your Organizational Letterhead]

MEMORANDUM FOR        DTRA/CSTD  
                                  ATTN: Student Services  
                                  1680 Texas St. SE  
                                  Kirtland AFB NM 87117-5669

SUBJECT: Request for Mobile Training Team (MTT) Visit

1. Request MTT visit. The following information is provided:
  - a. Course Requested: ***(name and course number)***
  - b. Requesting Organization: ***(location and organizational mission)***
  - c. Expected Audience: ***(background of audience and number of students—minimum of 40)***
  - d. Requested Time Period: ***(provide all available options)***
  - e. Equipment Available to Support Training:
  - f. Point of Contact/Resource Management Liaison: ***(provide POC to act as liaison between servicing accounting office and MTT)***
  - g. Other: ***(address any other pertinent information to assist in training)***
2. My organization accepts responsibility for ensuring all personnel projected to attend the MTT have proper security clearance and access for the course. A consolidated list of students, to include full name, rank or grade, SSN, and security clearance will be provided to instructors before the course begins.
3. My organization also accepts responsibility for all expenses associated with this MTT, including travel-related costs. Furthermore, we agree to provide administrative support as required. Funding and travel order authorization letter for mobile training team will be forwarded to the DNWS no later than 15 working days prior to class start date.
4. We understand that approval of this request is based on Defense Nuclear Weapons School (DNWS) course/duty schedules.
5. Direct questions on this request to (point of contact and duty phone).

[Requesting official signature & signature block]





**DEFENSE THREAT REDUCTION AGENCY**

1680 TEXAS STREET SE  
KIRTLAND AFB, NM 87117-5669

FROM: DTRA/CSTD

SUBJECT: Defense Nuclear Weapons School (DNWS) Memorandum, Funding and Travel Order Issuance for Mobile Training Teams (MTT)

1. This memorandum issues guidance for funding of DNWS MTTs. All expenses associated with MTT visits are the responsibility of requesting agency. Expenses include but are not limited to transportation, billeting, meals, car rental, and any others authorized by the Joint Federal Travel Regulations.
2. The requesting activity will issue a travel letter of authorization to DNWS. The authorization letter will include the not to exceed (NTE) amount for travel POC at the requesting activity, telephone number, FAX number, and any other information required to process the voucher.
3. DNWS will cut the DD 1610, *Request and Authorization for TDY Travel of DoD Personnel*, and will cite the requestor funds as outlined in the letter of authorization.
4. Upon return from TDY the traveler will prepare a DD Form 1351-2, *Travel Voucher or Subvoucher*, and send to DNWS finance who will forward to the requesting agency for payment.
5. If you have any questions regarding this policy, contact Student Services, DSN 246-5666 (commercial 505-846-5666 or the Chief of Instruction, DSN 263-0211 (commercial 505-853-0211).

A handwritten signature in black ink that reads "Charles A. Pryde".

Charles A. Pryde  
LTC, USA  
Commandant  
Defense Nuclear Weapons School

FROM: YOUR ORGANIZATION

MEMORANDUM FOR DNWS

SUBJECT: Funding and Travel Order Authorization for Mobile Training Team (MTT)

1. Expenses are authorized for (names of personnel) to include but are not limited to transportation, billeting, meals, car rental, as well as any other expenses authorized by the Joint Federal Travel Regulations.

- a. Fund Cite:
- b. Not to exceed (NTE) amount for travel:

2. DNWS will cut the DD 1610, *Request and Authorization for TDY Travel of DoD Personnel*, and will cite the requestor funds as outlined in the letter of authorization.

3. Upon return from TDY the traveler will prepare the DD Form 1351-2, *Travel Voucher or Subvoucher*, and send to DNWS finance who will forward to the requesting agency for payment.

4. If you have any questions regarding this policy, contact (your organizational POC).

Signature/Signature Block

# Sample Request for DOE Personnel to Attend a DNWS Course

DOE F 5631.20  
(2-87)  
(FORMERLY DP-277)

U.S. DEPARTMENT OF ENERGY  
**REQUEST FOR VISIT OR ACCESS APPROVAL**  
(NOT TO BE USED FOR TEMPORARY OR PERMANENT PERSONNEL ASSIGNMENTS.)

OMB Control  
No. 1910-1800

**PART "A"**

To: **DEFENSE NUCLEAR WEAPONS SCHOOL**  
**1900 WYOMING BLVD SE**  
**KIRTLAND AFB NM 87117-5000**

Date: **Current Date**

Prepared By: **Name/Position of Preparer**

Symbol: **Office Symbol or Organization**

From: **(ENTER STUDENT'S ORGANIZATION)**

Telephone No.-Commercial: **Commercial Phone Number**

It is requested that the following person(s) be granted visit/access approval

FTS: **(ENTER DSN NUMBER)**

LAST NAME, FIRST, MIDDLE INITIAL AND SOCIAL SECURITY NUMBER	CHECK		DATE OF BIRTH	ORGANIZATION	TYPE CLEARANCE	CLEARANCE NO.	DATE OF CLEARANCE
	U.S. CITIZEN	ALIEN					
<b>(ENTER STUDENT'S NAME AND INFO AS APPLICABLE)</b>							
NAME OF FACILITY TO BE VISITED <b>DEFENSE NUCLEAR WEAPONS SCHOOL, KIRTLAND AFB NM</b>				FOR THE INCLUSIVE DATES <b>(ENTER CLASS DATES)</b>	DOE SECURITY OFFICIAL VERIFYING DOE CLEARANCE		

FOR THE PURPOSE OF:

**To attend (ENTER COURSE TITLE)**

TO CONFER WITH THE FOLLOWING PERSON(S):

**(ENTER RANK/NAME OF DNWS REGISTRAR OR RANK/NAME OF COURSE INSTRUCTOR)**

SPECIFIC INFORMATION TO WHICH ACCESS IS REQUESTED

**SECRET/RD/CNWDI; SIGMAS 1-5**

ACCESS REQUESTED TO:

RESTRICTED DATA

☒ YES

☐ NO

OTHER CLASSIFIED INFO

☒ YES

☐ NO

PRIOR ARRANGEMENTS HAVE/HAVE NOT BEEN MADE AS FOLLOWS:

**NA**

**CERTIFICATION FOR PERSONNEL HAVING DOD CLEARANCE**

This certifies that the person(s) named above needs this access in the performance of duty and that permitting the above access will not endanger the common defense and security.

Authorized access to Critical Nuclear Weapon  
Design Information (CNWDI) in Accordance  
with DoD Directive 5210.2 ☒ Yes ☐ No  
FOR THE COMMANDER

**(TYPE FIRST AND LAST NAME)**  
**CHIEF, SECURITY OFFICE**

Name and Title, Requesting DoD Official

**(TYPE NAME OF AUTHORIZING OFFICIAL, PER DoD Dir 5210.2)**

**(SECURITY OFFICER'S SIGNATURE)**

Title, Authorizing DoD Official  
(See DoD Directive 5210.2 and 5210.8)

Signature  
(See AR 380-150; OPNAV 5510.3F; AFR 205-1)

**CERTIFICATION FOR PERSONNEL HAVING DOE CLEARANCE**

This certifies that the person(s) named above needs this access in the performance of duty.

Title

Requesting DOE or Other Government Agencies

**PART "B"**

Approval is granted with limitations indicated below:

Manager of Operations/or Headquarters Division Director

# Sample Request for DoD Personnel to Attend a DOE Facility (JNEODC Course)

DOE F 5631.20  
(2-87)  
(FORMERLY DP=277)

U.S. DEPARTMENT OF ENERGY  
**REQUEST FOR VISIT OR ACCESS APPROVAL**  
(NOT TO BE USED FOR TEMPORARY OR PERMANENT PERSONNEL ASSIGNMENTS.)  
**PART "A"**

OMB Control  
No. 1910-1800

To: **SANDIA NAT'L LABS**  
**ATTN: Visitor Control or 7437-1/MS0171 14703/MS0643**  
**PO BOX 5800**  
**ALBUQUERQUE NM 87185**

Date: **(Current Date)**  
Prepared By: **(Name/Position of Preparer)**  
Symbol: **(Office Symbol or Organization)**  
Telephone No.-Commercial: **(Commercial Phone Number)**

From: **(ENTER STUDENT'S ORGANIZATION)**

It is requested that the following person(s) be granted visit/access approval

FTS: **(ENTER DSN PHONE NUMBER)**

LAST NAME, FIRST, MIDDLE INITIAL AND SOCIAL SECURITY NUMBER	CHECK		DATE OF BIRTH	ORGANIZATION	TYPE CLEARANCE	CLEARANCE NO.	DATE OF CLEARANCE
	U.S. CITIZEN	ALIEN					
<b>DOE, JOHN J., (RANK OR PAYGRADE), (BRANCH OF SERVICE), SSAN</b>	<input checked="" type="checkbox"/>		<b>20 Apr 1967</b>	<b>(ENTER STUDENT'S ORGANIZATION)</b>	<b>(TOP SECRET OR SECRET ONLY!)</b>		<b>10 JUN 1995</b>
NAME OF FACILITY TO BE VISITED <b>SANDIA NAT'L LABS, ALBUQUERQUE, NM, AND DEFENSE NUCLEAR WEAPONS SCHOOL, KIRTLAND AFB NM</b>				FOR THE INCLUSIVE DATES <b>(ENTER CLASS DATES)</b>	DOE SECURITY OFFICIAL VERIFYING DOE CLEARANCE		

FOR THE PURPOSE OF:

**TO ATTEND THE JOINT NUCLEAR EXPLOSIVE ORDNANCE DISPOSAL COURSE (JNEODC)**

TO CONFER WITH THE FOLLOWING PERSON(S):

**(ENTER RANK/NAME OF DNWS REGISTRAR OR RANK/NAME OF COURSE INSTRUCTOR)**

SPECIFIC INFORMATION TO WHICH ACCESS IS REQUESTED

**SECRET/RD/CNWDI; SIGMAS 1-5**

ACCESS REQUESTED TO:

**RESTRICTED DATA**

☒ YES

☐ NO

**OTHER CLASSIFIED INFO**

☒ YES

☐ NO

PRIOR ARRANGEMENTS HAVE/HAVE NOT BEEN MADE AS FOLLOWS:

**NA**

## CERTIFICATION FOR PERSONNEL HAVING DOD CLEARANCE

This certifies that the person(s) named above needs this access in the performance of duty and that permitting the above access will not endanger the common defense and security.

Authorized access to Critical Nuclear Weapon  
Design Information (CNWDI) in Accordance  
with DoD Directive 5210.2 ☒ Yes ☐ No  
FOR THE COMMANDER

**(TYPE FIRST AND LAST NAME)**  
**CHIEF, SECURITY OFFICE**

Name and Title, Requesting DoD Official

**(TYPE NAME OF AUTHORIZING OFFICIAL, PER DoD Dir 5210.2)**

**(SECURITY OFFICER'S SIGNATURE)**

Title, Authorizing DoD Official  
(See DoD Directive 5210.2 and 5210.8)

Signature  
(See AR 380-150; OPNAV 5510.3F; AFR 205-1)

## CERTIFICATION FOR PERSONNEL HAVING DOE CLEARANCE

This certifies that the person(s) named above needs this access in the performance of duty.

Title

Requesting DOE or Other Government Agencies

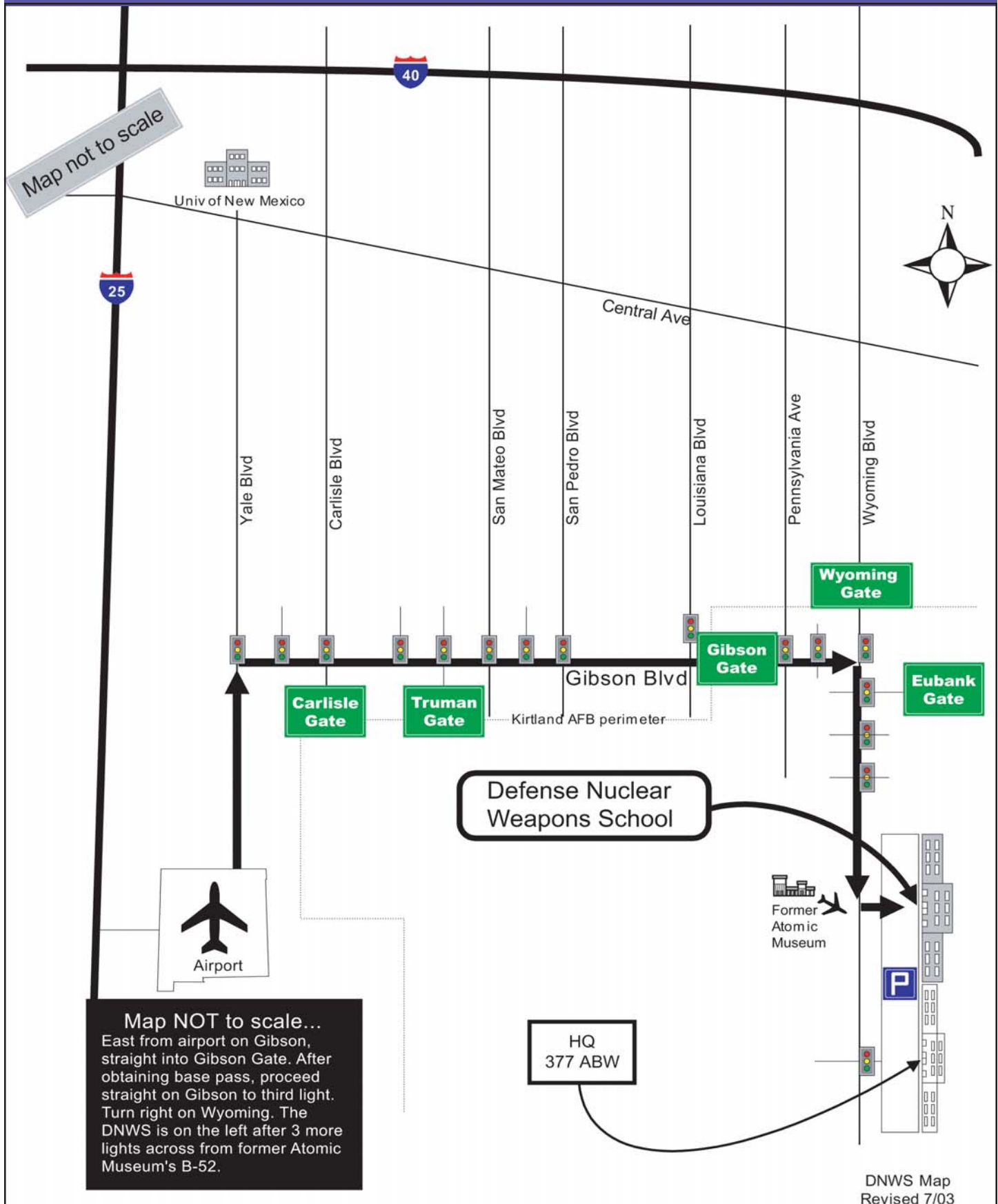
## PART "B"

Approval is granted with limitations indicated below:

Director

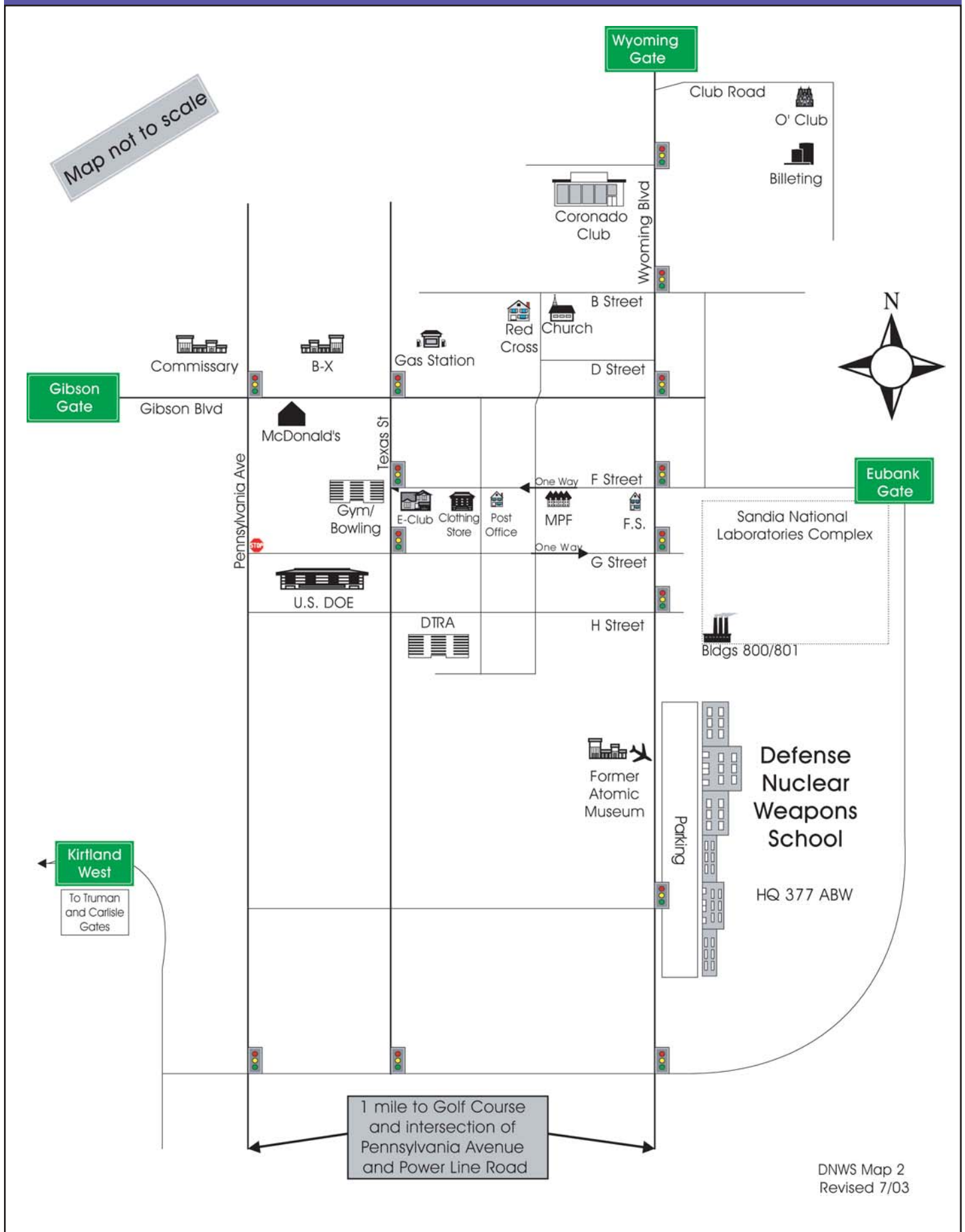
Manager of Operations/or Headquarters Division

# Map from Albuquerque Int'l Airport to Kirtland AFB





# Map of Kirtland AFB



## DNWS Course Registration Form

# DEFENSE NUCLEAR WEAPONS SCHOOL COURSE REGISTRATION

**\*\*For Official Use Only. Privacy Act of 1974 Applies\*\***

### PRIVACY ACT STATEMENT

1. **AUTHORITY:** 5 USC 301, 302, 4103, and Executive Order 9397
2. **PRINCIPAL PURPOSE(S):** To report attendance and completion of formal courses (orientation and resident)
3. **ROUTINE USES:** To report entrance and change of status of students in special training courses
4. **DISCLOSURE:** Applicants are not required to divulge the personal information requested on this form; however, failure to do so may render applicant ineligible to participate in the training program, or may result in non-receipt of credit for requested training

**INSTRUCTIONS:** This form and any other registration data must be received a minimum of 15 working days prior to class start date. To register for a DNWS course, please ensure this form is completed and faxed to commercial line (505) 846-9168, or DSN 246-9168, or mail to: DNWS Registrar, 1900 Wyoming Blvd, Kirtland AFB, NM, 87117-5669. For questions regarding the completion of this form, please contact DNWS Student Services at (505) 846-6584 or DSN 246-6584.

### SECTION I--REGISTRANT'S INFORMATION

<b>NAME</b> (Last, First, MI)		RANK/GRADE	SSAN
SERVICE (AF, Army, USN, USMC)	AGENCY	DUTY TITLE	
UNIT MAILING ADDRESS (Organization, Street Number, Street Name, Installation or City, State, and Complete Zip Code)			
ELECTRONIC MAIL ADDRESS		DUTY PHONE	FAX NUMBER

#### • COURSE INFORMATION

COURSE TITLE/NUMBER	CLASS START DATE	CLASS END DATE
---------------------	------------------	----------------

- **EMERGENCY CONTACT** (Enter name, relationship, and phone number, including area code, of an individual who can be contacted after normal duty hours in the event of an emergency)

NAME	RELATIONSHIP	TELEPHONE
------	--------------	-----------

#### • REGISTRANT'S SIGNATURE

SIGNATURE	DATE
-----------	------

### SECTION II--SECURITY CLEARANCE/SPECIAL ACCESS—To be Completed and Signed by Unit Security Manager

Some courses require security clearance and special access. Refer to course descriptions for prerequisites. **NOTE:** DOE personnel registering for classified courses **MUST** submit DOE Form 5631.20. To tour the Weapons Display Area, all students/visitors are required to have a DoD Secret-level clearance with access to Restricted Data (RD) or Critical Nuclear Weapons Design Information (CNWDI).

REGISTRANT'S CLEARANCE LEVEL	DATE OF CLEARANCE
------------------------------	-------------------

#### • ACCESS—MANDATORY FOR CLASSIFIED COURSES AND WDA TOURS

Check Authorized Access <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span>NONE</span> <span>RESTRICTED DATA</span> <span>CNWDI</span> </div>	Access Date
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

#### • SECURITY MANAGER'S CERTIFICATION

**I certify that the above-named registrant requires access as indicated in this document in the performance of duty and that permitting such will not endanger command defense and security.**

UNIT SECURITY MANAGER'S TYPED/PRINTED NAME	DUTY PHONE
UNIT SECURITY MANAGER'S SIGNATURE	DATE





<https://dnws.abq.dtra.mil>





home page: <https://dnws.abq.dtra.mil>  
e-mail: [dnws@abq.dtra.mil](mailto:dnws@abq.dtra.mil)